

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 February 2004 (05.02.2004)

PCT

(10) International Publication Number
WO 2004/011841 A1

(51) International Patent Classification⁷: **F16L 23/00**

(21) International Application Number:
PCT/GB2003/003262

(22) International Filing Date: 24 July 2003 (24.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0217581.8 30 July 2002 (30.07.2002) GB

(71) Applicant and

(72) Inventor: WILLIAMS, David [GB/GB]; 1 Meadowside,
Croston, Leyland, Lancashire PR29 9QY (GB).

(74) Agents: ROYSTONS et al.; Tower Building, Water Street,
Liverpool L3 1BA, Merseyside (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

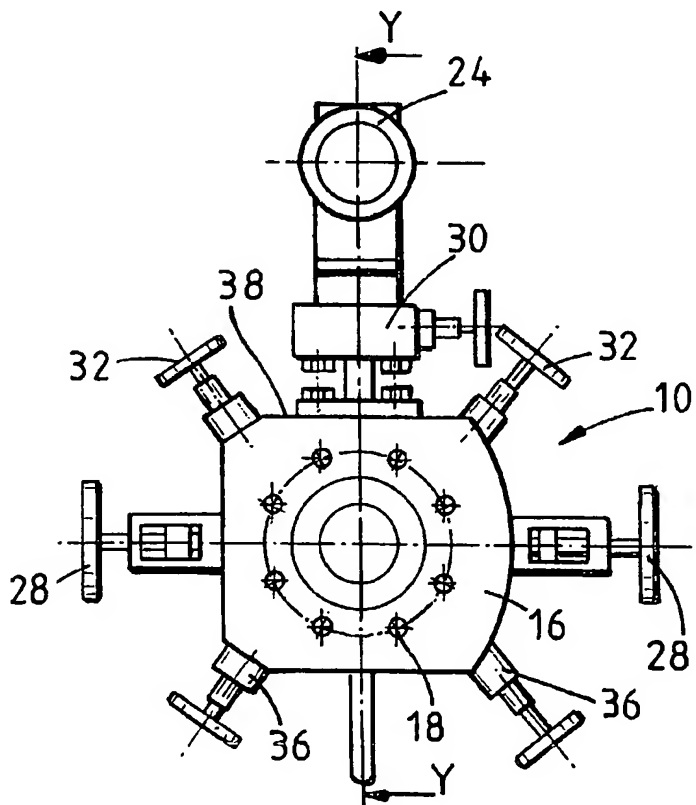
(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

[Continued on next page]

(54) Title: PIPE COUPLING



(57) Abstract: A pipe coupling flange (16) comprising a central bore and having first and second ports for receiving valves and a plurality of channels, wherein a take-off channel links the first port with the central bore, a feed channel links the first port directly or indirectly with the second port; and wherein the second port links directly or indirectly with the exterior of the flange. Across two pipe flanges (16), and fixed directly to the periphery of each flange there may be a Bridge (30). The bridge (30) may be capable of having process media (24) monitoring devices fixed directly to it.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.